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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/767,365	01/22/2001	Sheng Liang	2006579-0558 (CTX-199)	2538

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EXAMINER	
TRAN, QUOC A	

ART UNIT	PAPER NUMBER
2176	

MAIL DATE	DELIVERY MODE
07/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/767,365	LIANG ET AL.	
	Examiner	Art Unit	
	Tran A. Quoc	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 May 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4-6,8-13 and 15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4-6,8-13 and 15* is/are rejected.

7)☒ Claim(s) *1,11,13 and 15* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *04 May 2007* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This is a **Final Rejection** in response to the Amendment/Remarks filed on 05-04-2007.

2. Claims 1, 4-6, 8-13 and 15 are pending. Claims 1, 6, 8-11, 13 and 15 are independent claims. Applicants have amended claims 1, 4-5, 8, 10-13, and 15.

3. Effective filling dated 01-21-2001, which claimed benefit of 60/228,904 filed 08-29-2000 to assignee Stratum8.

4. Object to the rendering the scope of the claim(s) unascertainable to claims 1, 6, 10, 13, and 15, which presented in the previous office action dated 12-04-2006 are withdrawn due to applicants' amendments.

Claim Objection

5. Claims 1, 11, 13 and 15, objected to because of the following informalities:

Regarding claim(s) 1, 13 and 15, in the preamble, the phrase "parsing input data" renders the claim(s) indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. The Examiner is uncertain of the applicant intention "parsing input data". The Examiner reads "parsing input data" as parsing receiving data, thereby rendering the scope of the claim(s) unascertainable. Appropriate correction is required.

Drawings

6. The Drawings are objected to because of the following informalities:

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the limitation (s) "syntax tree, "token master" (See disclosure page 7 line 22 item 516 of fig. 5) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

In addition, corrected drawing sheets in compliance with 37 CFR 1.84(h), (i), (l), (p) are required: Views not labeled properly, words do not appear horizontal, left to right fashion, and lines, number & letter not uniformly thick, and well defined, clean (poor line

quality), not number and reference not plain, and legible (see fig. 2-7). Appropriate correction is required.

Interpretations of Claims Language

7. It is noted that the terms "data file," "syntax tree," and "nodes and tokens," require interpretation. Upon review of the specification and claims, the Examiner believes Applicants intended these terms to be defined and function as follows:

a) "data file," is web page(s) (HTML page (s)) that contains some unchanging (static) contents. See current disclosure page 3 lines 8-10. In its broadest reasonable interpretation, the "data file" for this analysis, will be considered to be ordinary web page that contain some unchanging (static) content.

b) "syntax tree," and "nodes and tokens," is a template/token tree wherein an AST (abstract syntax tree) modified to contain "nodes and tokens". Each node of the tree is initially label as a static node..." (see current disclosure page 11 lines 1-10). In its broadest reasonable interpretation, the web page (HTML page) parses and a template/token tree is being built, which contains "nodes and tokens," For example, a template provides an initial definition for the Web page. It is used to generate a tree of objects that can be used to generate the Web page. The template and corresponding object tree can be modified dynamically bases on the associations and custom logic (syntax).

By the Examiner's analysis, of what, is believed to have been intended to be claimed by the Applicants; the invention is the web pages and their associated AST (Abstract Syntax Tree) are then cached. When a new version of a page that already is stored in the cache is retrieved, the new version of the page is compared to the stored version to determine which portions of the new version contain new content. Static nodes are identified and the remaining is deemed to be dynamic content. Once the dynamic content of the page has been identified, it is parsed to form dynamic AST nodes, which may be combined with the cached static nodes to form a complete AST (i.e. web page (structure page) ready for rendering).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> ***(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.***

Claims 1, 4-6, 8-12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agrawal et al. US20020004813A – provisional 60/187,925 filed 03-08-2000 (hereinafter Agrawal), in view of Melbin US 20030018612A1 Continuation No. 09/262,392 filed 03-04-1999 (hereinafter Melbin), further in view of Hirose et al. US 20050246635A1 continuation of 09/343,992 filed 06-30-1999 (hereinafter Hirose).

Regarding **independent claim 1,** Agrawal teaches:

a computer-implemented method for efficiently parsing input data, comprising: receiving a data file;

(See Agrawal Fig. 6, and para 15, discloses assembling the requested document from at least one of the retrieved and dynamically HTML document.)

retrieving a store version of the data file,

(See Agrawal the Abstract, discloses request for a page is received over a computer network, one or more of the plurality of blocks defined in the script of the requested document may be retrieved from a cache memory.)

comparing the stored version of the data file with the received data file to identify non-matching content of the received data file,

(See Agrawal para 17, retrieving at least one of the plurality of blocks defined in the script of the requested document from a memory when the memory stores the at least one of the plurality of blocks defined in the script of the requested document; and dynamically generating any block defined in the script of the requested document that may be not stored in the memory and storing a copy of each dynamically generated block in the memory. Using the broadest reasonable interpretation, it is noted the claimed **data file, non-matching content,** are equivalent to block defined in the script of the requested document (web page) that may be not stored in the memory as taught by Agrawal.

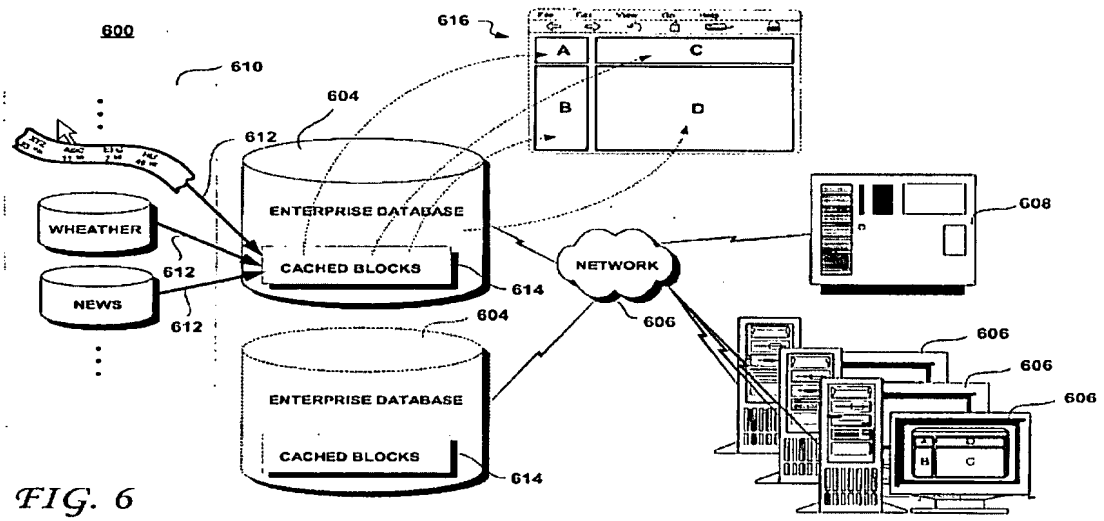


FIG. 6

creating a mapping from each token to one of the subtrees.

(See Agrawal para 31, teaching when pages are generated using scripting solutions like ASPs or JSP, each page block is generated by a clearly defined combination of code and static HTML in the script. This enables a one-to-one mapping of the portions of code in the scripted page to blocks in the final page. Using the broadest reasonable interpretation, the examiner equates the claimed **mapping from each token to one of the subtrees** is equivalent to enables a one-to-one mapping of the portions of code in the scripted page (i.e. token) to blocks in the final page (i.e. subtree) as taught by Agrawal.

In addition, Agrawal does not explicitly teach, but Melbin teaches:

syntax tree comprising nodes and tokens representing data within the data file, the tree including at least one static node,

(See Melbin para 7, discloses pages are generated automatically, on demand, by maintaining the form, or design of the pages, distinct from the content of the pages. When the pages are requested, the content server automatically joins the page content to the page design. It is noted the claimed **at least one static node** is equivalent to maintaining the form, or design of the pages, distinct from the content of the pages as taught by Melbin.

Also, see Melbin para 8, discloses content server generates and stores pages depending upon their expected use. For example, entire pages, or small page components referred to herein as "elements," are locally cached in a file or database for later access. Whether a page is cached as a completed unit or as a set of elements depends upon whether elements contain dynamic content. In its broadest reasonable interpretation, the examiner equates the claimed **tokens** is equivalent to element**s** as taught by Melbin, since in programming languages, a single element of a programming language. For example, a token could be a keyword, an operator, or a punctuation mark, and in networking, a token is a special series of bits that travels around a token-ring network.

Also, see Melbin para 14, discloses execution tree representation of the element is built. It is this executable tree representation of the element, which is cached. It is noted the claimed **syntax tree** is equivalent to execution tree as taught by Melbin.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Agrawal's partial page caching of dynamic generated content, to includes syntax tree comprising nodes and tokens representing

data within the data file, the tree including at least one static node, as taught by Melbin. One of the ordinary skills in the art would have been motivated to perform such a modification, because they are from the same field of endeavor of parsing a static web page into dynamic sub section from plurality of disparate sources from servers for updating live data such as weather, news and live stocks quote in the www and/or Internet and provides more efficiently servicing requests for dynamic content, and efficiently caching dynamic content and for servicing incoming requests for such dynamic content at least partially by accessing and retrieving the cached content (see Agrawal para 11).

In addition, Agrawal and Melbin do not expressly teach, but Hirose teaches:

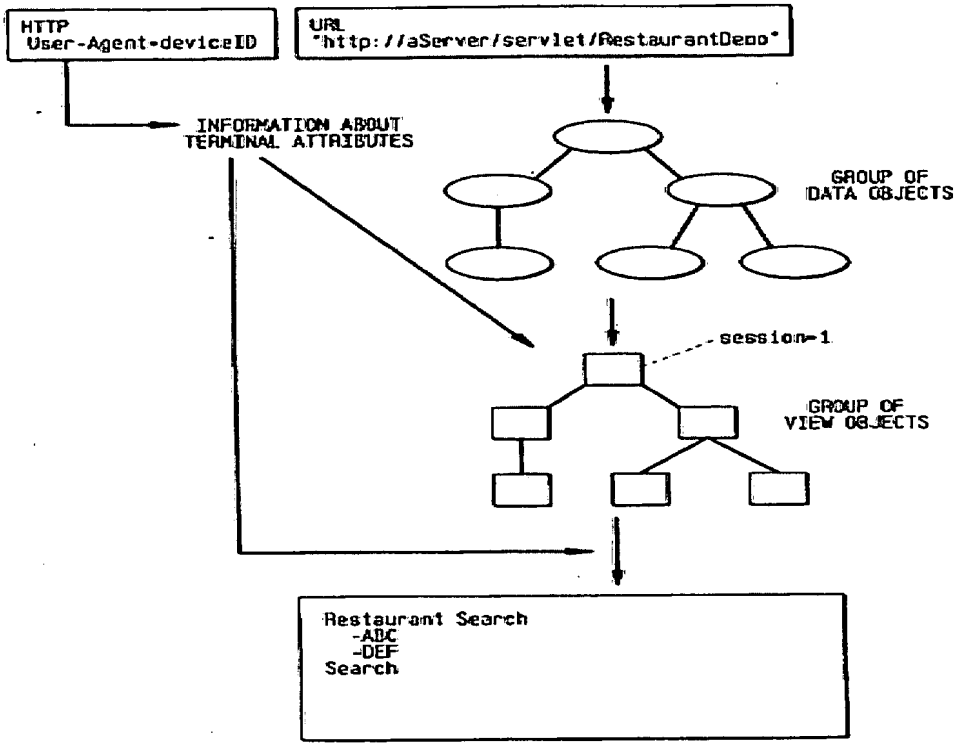
replacing at least one static node of the syntax tree with a token,

(See Hirose Fig. 5, and para 11, describes parsing the HTML document into an AST (Abstract Syntax Tree) and performing predetermined transforming operations on the AST. In Digestor, an HTTP server must first creates an HTML document which is accordingly required when creating an AST.

Also, see Hirose Fig. 5 and para 27, teaching the root object generates display control information for an entire page, and the child objects generate display control information for the page content. Using the broadest reasonable interpretation, it is noted the claimed **the syntax tree with a token** is equivalent to parsing the HTML document into an AST (Abstract Syntax Tree), wherein the AST includes nodes and tokens, and the claimed static node is the root object generates display control

information for an entire page (also see Interpretations of Claims Language as cites above in section 5).)

FIG. 5



It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Agrawal and Melbin partial page caching of dynamic generated content, to includes a means of replacing at least one static node of the syntax tree with a token, as taught by Hirose. One of the ordinary skills in the art would have been motivated to perform such a modification, because they are from the same field of endeavor of parsing a static web page into dynamic sub section from plurality of disparate sources from servers for updating live data such as weather, news and live stocks quote in the www and/or Internet and provides more efficiently servicing requests for dynamic content, and efficiently caching dynamic content and for servicing

incoming requests for such dynamic content at least partially by accessing and retrieving the cached content (see Agrawal para 11).

Regarding **dependent claim 4,** Agrawal teaches:

wherein the data file is a web page,

(See Agrawal Fig. 6, and para 15, discloses assembling the requested document from at least one of the retrieved and dynamically HTML document.)

Regarding **dependent claim 5,** Agrawal teaches:

wherein the data file is an HTML file,

(See Agrawal Fig. 6, and para 15, discloses assembling the requested document from at least one of the retrieved and dynamically HTML document.)

Regarding **independent claims 6 and 8,**

the rejection of claims 1, and 4-5 are fully incorporated, and are similarly rejected under the same rationale.

Regarding **independent claims 9 and 10,**

the rejection of claims 1, and 4-5 are fully incorporated,

In addition, Agrawal teaches:

retrieving data from plurality of primary service providers on behalf of the customer,

(See Agrawal para 36, discloses load balancing and pooling, network services like security and directory and message-oriented middleware for facilitating new applications.

Also, see Agrawal para 34, discloses services that user's HTTP request or the constituent blocks of the requested page may be sent over the computer network (e.g., Internet) to be assembled by the client browser (or some combination of these methodologies).

In addition, Hirose teaches:

providing derivative services,

(See Hirose at par 81, teaching an HTML document is dynamically generated by using a mechanism called CGI (Common Gateway Interface) or a servlet (See Sun Microsystems Inc., Java, JDK 1.2, "http://jservjavasoft.com/products/java-server/servlets/"). It is also possible to implement the components required for the present invention in a form of a Web proxy server. Using its broadest reasonable interpretation, the examiner reads the claimed **derivative services** is web proxy server as taught by Hirose.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Agrawal and Melbin partial page caching of dynamic generated content, to includes a means of providing derivative services, as taught by Hirose. One of the ordinary skills in the art would have been motivated to perform such a modification, because they are from the same field of endeavor of parsing a static web page into dynamic sub section from plurality of disparate sources

from servers for updating live data such as weather, news and live stocks quote in the www and/or Internet and provides more efficiently servicing requests for dynamic content, and efficiently caching dynamic content and for servicing incoming requests for such dynamic content at least partially by accessing and retrieving the cached content (see Agrawal para 11).

Regarding **independent claim 11,**

the rejection of claims 1, and 4-5 are fully incorporated,

In addition, Arawal teaches:

retrieving a second data file, the second data file associated with the first data file, identifying non-matching content present only in the first data file,

(See Agrawal para 17, retrieving at least one of the plurality of blocks defined in the script of the requested document from a memory when the memory stores the at least one of the plurality of blocks defined in the script of the requested document; and dynamically generating any block defined in the script of the requested document that may be not stored in the memory and storing a copy of each dynamically generated block in the memory. Using the broadest reasonable interpretation, it is noted the claimed **data file, non-matching content,** are equivalent to block defined in the script of the requested document (web page) that may be not stored in the memory as taught by Agrawal.

Regarding **claim 12,** Arawal teaches:

responsive to identifying non-matching content present only in the first data file,

(See Agrawal para 17, retrieving at least one of the plurality of blocks defined in the script of the requested document from a memory when the memory stores the at least one of the plurality of blocks defined in the script of the requested document; and dynamically generating any block defined in the script of the requested document that may be not stored in the memory and storing a copy of each dynamically generated block in the memory.)

In addition, Hirose teaches:

adding at least one new token to syntax tree,

(See Hirose Fig. 5, and para 11, describes parsing the HTML document into an AST (Abstract Syntax Tree) and performing predetermined transforming operations on the AST. In Digestor, an HTTP server must first creates an HTML document which is accordingly required when creating an AST.

Also, see Hirose Fig. 5 and para 27, teaching the root object generates display control information for an entire page, and the child objects generate display control information for the page content. Using the broadest reasonable interpretation, it is noted the claimed **the syntax tree with a token** is equivalent to parsing the HTML document into an AST (Abstract Syntax Tree), wherein the AST includes nodes and tokens, and the claimed static node is the root object generates display control

information for an entire page (also see Interpretations of Claims Language as cites above in section 5).)

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Agrawal and Melbin partial page caching of dynamic generated content, to includes a means of adding at least one new token to syntax tree, as taught by Hirose. One of the ordinary skills in the art would have been motivated to perform such a modification, because they are from the same field of endeavor of parsing a static web page into dynamic sub section from plurality of disparate sources from servers for updating live data such as weather, news and live stocks quote in the www and/or Internet and provides more efficiently servicing requests for dynamic content, and efficiently caching dynamic content and for servicing incoming requests for such dynamic content at least partially by accessing and retrieving the cached content (see Agrawal para 11).

Regarding **independent claim 13,** the rejection of claim 1 is fully incorporated.

In addition, Melbin teaches:

A token master,

(See Melbin para 20, a synchronous set of servers may be designated as a sync master. Using the broadest reasonable interpretation, the examiner equates the claimed token master as equivalent to a sync master as taught by Melbin.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Agrawal and Hirose partial page caching of

dynamic generated content, to includes a means of utilizing a token master, as taught by Melbin. One of the ordinary skills in the art would have been motivated to perform such a modification, because they are from the same field of endeavor of parsing a static web page into dynamic sub section from plurality of disparate sources from servers for updating live data such as weather, news and live stocks quote in the www and/or Internet and provides more efficiently servicing requests for dynamic content, and efficiently caching dynamic content and for servicing incoming requests for such dynamic content at least partially by accessing and retrieving the cached content (see Agrawal para 11).

In addition, Agrawal and Melbin do not expressly teach, but Hirose teaches:

At least one virtual browser for retrieving content from primary content server,

(See Hirose at par 81, teaching an HTML document is dynamically generated by using a mechanism called CGI (Common Gateway Interface) or a servlet (See Sun Microsystems Inc., Java, JDK 1.2, "http://jservjavasoft.com/products/java-server/servlets/"). It is also possible to implement the components required for the present invention in a form of a Web proxy server. Using its broadest reasonable interpretation, the examiner reads the claimed **virtual browser** is web proxy server as taught by Hirose.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Agrawal and Melbin partial page caching of

dynamic generated content, to includes a means of providing at least one virtual browser for retrieving content from primary content server, as taught by Hirose. One of the ordinary skills in the art would have been motivated to perform such a modification, because they are from the same field of endeavor of parsing a static web page into dynamic sub section from plurality of disparate sources from servers for updating live data such as weather, news and live stocks quote in the www and/or Internet and provides more efficiently servicing requests for dynamic content, and efficiently caching dynamic content and for servicing incoming requests for such dynamic content at least partially by accessing and retrieving the cached content (see Agrawal para 11).

Regarding **independent claim 15,**

is directed to a computer program product and instructions for performing the method of claim 1, and is similarly rejected along the same rationale.

9. It is noted that any citations to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. See, MPEP 2123.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quoc A. Tran whose telephone number is 571-272-8664. The examiner can normally be reached on Monday through Friday from 9 AM to 5 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton can be reached on 571-272-4137. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Quoc A, Tran
Patent Examiner
Technology Center 2176
07-20-2007

7/22/07

/Doug Hutton/
Supervisory Primary Examiner
Art Unit 2176